DFUSB: USB interface module

DFUSB module allows interfacing the **Domino** bus to a Personal Computer through the USB port. Equipping the PC with the specific program provided by **DUEMMEGI** (free of charge), named *BDTools,* an easy and fast setting up of the installation can be executed.

BDTools support program allows to perform many functions, like the addressing of the modules, the programming of the plant functions, reading and editing the operating program, and so on.

DFUSB module allows to realize a simple supervision systems by a PC equipped with proper programs (SCADA or similar); in this way it is possible to monitor and control the plant by means of graphical maps.

DFUSB housing is a standard DIN 2M module and it provides a 2-pole terminal block for the connection to the bus (+ and -); like many modules of **Domino** family, the power supply for the module operation is derived from the bus itself.

A classic mini USB connector on the front panel allows the connection to the PC through the provided standard cable. A green LED (ON) monitors the power on condition and other two LEDs (TX, yellow, and RX, red) flash during the communication between DFUSB module and the PC.

It is possible to connect, in the same plant, more than one DFUSB module; in this case, however, only one interface at a time may be connected to the PC.

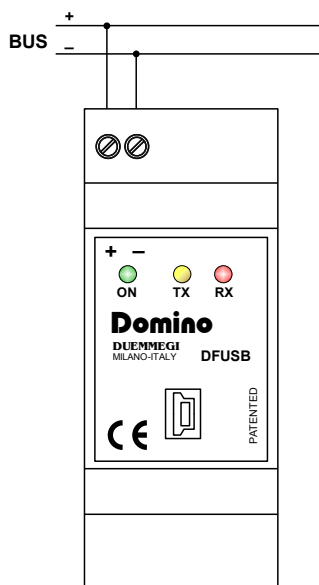On the contrary of the majority of other **Domino** modules, DFUSB interface does not require any address.

Module connection

DFUSB module allows the connection between the USB port of the PC and the **Domino** through the provided standard; the following schematic diagram shows the proper connections to be made.
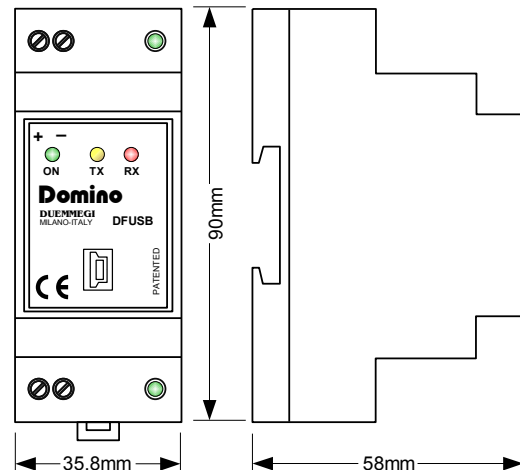

Technical characteristics

Power supply (bus side)	By specific centralized power supply mod. DFPW2
Interface	USB slave (uninsulated from the bus)
Housing	Standard DIN 2M for DIN rail
Operating temperature	-5 ÷ +50 °C
Storage temperature	-20 ÷ +70 °C
Protection degree	IP20

Outline dimensions

Note:
DFUSB module interfaces to the PC through a USB port, needing a specific driver for its proper operation. This driver is supplied together to BDTools program, starting for version 8.0.2 or higher. For the installation of the driver refer to the specific application note which can be found on Duemmegi site at the following address:
http://www.duemmegi.it/download/archivi/Driver DFUSB.pdf

Correct disposal of this product

(Waste Electrical & Electronic Equipment) (Applicable in the European Union and other European countries with separate collection systems). This marking on the product, accessories or literature indicates that the product should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

Installation and use restrictions

Standards and regulations

The design and the setting up of electrical systems must be performed according to the relevant standards, guidelines, specifications and regulations of the relevant country. The installation, configuration and programming of the devices must be carried out by trained personnel.
The installation and the wiring of the bus line and the related devices must be performed according to the recommendations of the manufacturers (reported on the specific data sheet of the product) and according to the applicable standards.
All the relevant safety regulations, e.g. accident prevention regulations, law on technical work equipment, must also be observed.

Safety instructions

Protect the unit against moisture, dirt and any kind of damage during transport, storage and operation. Do not operate the unit outside the specified technical data.
Never open the housing. If not otherwise specified, install in closed housing (e.g. distribution cabinet). Earth the unit at the terminals provided, if existing, for this purpose. Do not obstruct cooling of the units. Keep out of the reach of children.

Setting up

The physical address assignment and the setting of parameters (if any) must be performed by the specific softwares provided together the device or by the specific programmer. For the first installation of the device proceed according to the following guidelines:
I.   Check that any voltage supplying the plant has been removed
II.   Assign the address to module (if any)
III.   Install and wire the device according to the schematic diagrams on the specific data sheet of the product
IV.   Only then switch on the 230Vac supplying the bus power supply and the other related circuits

Applied standards

This device complies with the essential requirements of the following directives:
2004/108/CE (EMC)
2006/95/CE (Low Voltage)
2002/95/CE (RoHS)

Note

Technical characteristics and this data sheet are subject to change without notice.